

WHAT IS CLAIMED IS:

1. An apparatus for controlling a trip point; comprising:
 - at least one digital input configured to select a narrowed temperature range that is a portion of an entire temperature range;
 - a DAC configured to receive the at least one digital input, and in response, output a signal relating to the selected narrowed temperature range;
 - an external resistor configured to set the trip point; and
 - a comparator coupled to the external resistor and the DAC and configured to determine when the trip point has been tripped.
2. The apparatus of Claim 1, wherein the at least one digital input is under active control.
3. The apparatus of Claim 1, wherein the at least one digital input is hardwired.
4. The apparatus of Claim 1, further comprising a temperature sensor arranged to measure temperature and coupled to the comparator.
5. The apparatus of Claim 4, wherein the DAC is configured to generate a current in response to the at least one digital input.
6. The apparatus of Claim 5, wherein the entire temperature range spans about 180 degrees Celsius.
7. The apparatus of Claim 5, wherein the narrowed temperature range covers about 23 degrees Celsius.
8. An apparatus for controlling a trip point, comprising:

at least one digital input configured to select a narrowed temperature range that is a portion of an entire temperature range;

a multiplexer (MUX) configured to receive the at least one digital input, and in response output a signal relating to the narrowed temperature range;

an external resistor configured to set the trip point; and

a comparator coupled to the external resistor and the MUX and configured to determine when the trip point has been tripped.

9. The apparatus of Claim 8, wherein the at least one digital input is under active control.

10. The apparatus of Claim 1, wherein the at least one digital input is hardwired.

11. The apparatus of Claim 9, further comprising a temperature sensor arranged to measure temperature and coupled to the comparator.

12. The apparatus of Claim 11, wherein the entire temperature range spans about 180 degrees Celsius.

13. The apparatus of Claim 12, wherein the narrowed temperature range covers about 23 degrees Celsius.

14. A method for controlling a trip point for a circuit, comprising:

determining a state of at least one digital input;

selecting a narrowed temperature range that is a portion of an entire temperature range from the state of the at least one digital input;

setting the trip point;

monitoring a temperature associated with the circuit; and

determining when the trip point is tripped.

15. The method of Claim 14, further comprising performing a predetermined action when the trip point is tripped.

16. The method of Claim 14, wherein setting the trip point further comprises using an external resistor.

17. The method of Claim 16, further comprising actively controlling at least one digital input.

18. The method of Claim 14, further comprising testing a response of the circuit to an over temperature condition when the circuit is at a temperature below the over temperature condition.

19. An apparatus for controlling a trip point, comprising:
means for determining a state of at least one digital input;
means for selecting a narrowed temperature range that is a portion of an entire temperature range;
means for setting the trip point;
means for monitoring a temperature associated with the circuit; and
means for determining when the trip point is tripped.

20. The method of Claim 19, further comprising means for performing a predetermined action when the trip point is tripped.